

Appl. No. 10/723,441
Supplemental Amendment

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A magnetic pickup for a stringed musical instrument, where the instrument includes strings suspended between a string support structure that includes a sound board, comprising:

a primary coil rigidly fixed to the sound board of the musical instrument;

at least one magnet rigidly fixed to the primary coil that generates a static magnetic field along at least one pole piece encased within the primary coil;

a secondary coil located spaced apart from the primary coil and flexibly suspended to move relative to the primary coil;

wherein the primary coil is configured to generate a signal that includes a string signal and does not include a body signal~~a string signal~~; and

wherein the secondary coil is configured to generate a signal that includes a body signal and an attenuated string signal~~a body signal~~.

2. (Original) The pickup of claim 1, wherein the primary coil and the secondary coil are electrically coupled in a noise-cancellation circuit.

3. (Original) The pickup of claim 2, wherein the primary coil further comprises a primary coil winding wound in the same direction as a secondary coil winding in the secondary coil.

4. (Previously presented) The pickup of claim 1, further comprising a clamping mechanism attached to the primary coil that enables the primary coil to be removably attached to the sound board.

5. (Previously presented) The pickup of claim 1, wherein:
the soundboard includes a soundhole and the pickup is mounted in the soundhole;
the primary coil is positioned between the secondary coil and the strings.

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6. (Previously presented) The pickup of claim 1, wherein the soundboard includes a recess and the primary coil is fixedly mounted to a surface of the soundboard with the secondary coil extending into the recess.

7. (Original) The pickup of claim 1, wherein the secondary coil has a resonant frequency in the range from 100 Hz to 500 Hz.

8. (Original) The pickup of claim 1, wherein the flexible suspension mechanism has spring constant in the range from 1×10^4 N/m to 1×10^6 N/m.

9. (Original) The pickup of claim 8, wherein the secondary coil has a mass in the range from 15 grams to 25 grams.

10. - 23. (Cancelled)

24. (Currently Amended) A magnetic pickup for a stringed musical instrument, where the instrument includes strings suspended between a string support structure that includes a sound board, comprising:

- a primary coil rigidly fixed to the sound board;
- at least one magnet rigidly fixed to the primary coil that generates a static magnetic field along at least one pole piece encased within the primary coil;
- a secondary coil suspended below the primary coil via a flexible suspension mechanism;

wherein the suspension mechanism suppresses relative movement of the secondary coil as a unit perpendicular to the top portion of the musical instrument ~~with respect to the primary coil, when the sound board is oscillating in the ring mode.~~

25. (Previously presented) The magnetic pickup of claim 24, wherein:
the suspension mechanism is a pillar;
the centerline of the primary coil defines a Z axis;

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the primary coil is elongated in a direction that defines an X axis, which intersects the Z axis and is perpendicular to the Z axis;

the pillar is attached to the primary coil at a point that is centered with respect to the X axis; and

the pillar is attached to the secondary coil at a point that is centered with respect to the X axis.

26. (Previously presented) The magnetic pickup of claim 25, wherein:
a Y axis is defined in a direction that is perpendicular to the X axis and the Z axis;
the pillar is attached to the primary coil at a point on the Y axis offset from the intersection of the X axis and the Z axis; and
the pillar is attached to the secondary coil at a point similarly offset along the Y axis.

27. (Previously presented) The magnetic pickup of claim 24, wherein the secondary coil has a resonant frequency in the range from 100 Hz to 500 Hz.

28. (Previously presented) The magnetic pickup of claim 24, wherein the suspension mechanism has spring constant in the range from 1×10^4 N/m to 1×10^6 N/m.

29. (Previously presented) The magnetic pickup of claim 24, wherein the secondary coil has a mass in the range from 15 grams to 25 grams.

30. (Previously presented) The magnetic pickup of claim 24, wherein the suspension mechanism is a pillar constructed from ABS plastic.